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NAVAL ARMS CONTROL: AN IDEA
WHOSE TIME HAS YET TO COME

By

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Analysis of three major areas for naval arms control proposals: (1) restictions on strategic antisubmarine warfare, (2) naval operations, and (3) strategic antisubmarine warfare technology. Author reviews the goals of arms control and finds none of these three areas in need of regulation. Author concludes with a number of innovative areas for naval arms control in areas of doctrine, strategy, operations, and exercises with concrete recommendations and acceptable (to USN) fallback positions.

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Naval Arms Control: An Idea Whose Time Has Yet to Come?

James J. Tritten

Since 1945, a "Revolution in Military Affairs," created by the advent of nuclear weapons, has focused arms control attention primarily on strategic and other nuclear weapons. Limiting conventional forces, other naval weapons and other aspects of naval warfare has been somewhat ignored. But this is changing. Euphoria over the recent intermediate-range nuclear forces (INF) arms control treaty between the United States and the Soviet Union, "glasnost," "peristroika," the new defensive military doctrine in the Soviet Union, and a new American administration anxious to curb the growth rate of military expenditures, will likely shift new attention on naval and other forms of arms control.[1]

Supporters of naval arms control argue that controlling the fleet produces substantial benefits. First, the likelihood of war is reduced because of reduced military capabilities and a lessening of the fear over who could make a first strike. Secondly, if a war breaks out, the limited availability of weapons reduces the consequences or outcome. And thirdly, there is a possible reduction in the costs of maintaining a fleet because of the limitation of weaponry. These costs can also be reduced as Allies increasingly assume a larger share of the overall defense burden.

But what are some of the most recently proposed naval arms control initiatives and what are their possible consequences in relation to our naval force operations and restrictions on the development of our future technology? This paper will focus on

initiatives in three main areas: strategic antisubmarine warfare, naval operations, and technology.

Strategic Antisubmarine Warfare

Some civilians in the academic community question certain offensive operations called "strategic" antisubmarine warfare (ASW) or ASW operations against strategic nuclear-powered ballistic missile-carrying submarines (SSBNs). Proponents suggest that arms controls regulate such operations. Proposals to restrict deployments of SSBNs and place limitations on strategic ASW have been around for years, attracting the support of former US President Jimmy Carter, and more recently, Soviet Communist Party General Secretary Mikhail Gorbachev and a supporting cast of military officers and foreign ministry spokesmen.

Most of these proposals create safe zones in which SSBNs can be deployed. Within these zones, however, all ASW operations are forbidden. Such zones restrict virtually all warships, hydrographic vessels and other naval auxiliaries from operating in vast areas of the high seas since it can be argued that even routine transit by these ships results in their conducting certain phases of antisubmarine warfare. For example, ships transiting the ocean normally conduct visual and radar (if properly equipped) search - both forms of active ASW. Even passive search using basic electronics equipment is expected during the most routine and innocent transits, and most naval ships carry some electronic support measures (ESM) equipment.

Will safe zones restrict ASW research (scientific study of the environment that could advance ASW technology or capability) as well as actual ASW operations? The logical answer is "yes"; otherwise, a major loophole results allowing treaty circumvention and non-compliance when a nation claims it is only doing research and not actual ASW operations. Virtually all military ships conduct ASW "research" during a normal transit - fathometer soundings, bathythermograph readings and other routine observations on the condition of the seas. Therefore, a ban on ASW research again implies a ban on the passage of any ship capable of conducting these basic readings.

If ASW safe areas cause difficulties for naval ships, we should consider the difficulties similar restrictions place on fishing vessels and merchant ships. All ships flying the Soviet flag are state owned. Many civilian ships in the West are contracted for military related support services; hence, any visual or radar searches, fathometer soundings, bathythermograph readings, sea state recordings, or studies of marine biology by these ships is considered State run ASW operations or research. An ASW free zone, therefore, will be off limits to any state owned or contracted merchant or fishing vessel. Having vast areas of the ocean forbidden to transit by national flag vessels is clearly not in the best interest of either superpower. How would the US fishing, oil, and minerals industries react to being told that they could not conduct routine ocean observations or exploration in the Gulf of Alaska?

In analyzing such an arms control regime, verification problems abound. For example, if the West wishes to demonstrate that the Soviet Union is not complying with ASW restrictions or restrictions on the use of "safe" areas, but can only do so by exposing its own sophisticated technical or intelligence capabilities, it must chose between exposing the non-compliance and the related intelligence source or not publicizing the violation. Unfortunately, democracies have a poor track record generally choosing not to publicize "minor" violations, thus inviting totalitarian nations to take even further liberties with treaties.

Even if a nation can verify compliance, the net effect of any restrictions on strategic ASW or SSBN operations benefits the Soviet Union more than the West. In effect, such an arms control regime demands that the West identify the ocean areas in which its strategic missile-carrying submarines are deployed, something that we now avoid at all costs. Identification of deployment areas in order to designate ASW free zones greatly eases Soviets ASW search problems. Simply put, we will greatly reduce the rather large area of the world's oceans where the Soviet Union likes to look for US SSBNs. If we identify where to look for SSBNs, we probably weaken Western deterrence, including the deterrent umbrella extended by the US over its non-nuclear Allies.

The US has never built up to the maximum number of SSBNs allowable under the SALT I agreement. As we reduce the number of SSBNs further, it is in our and our Allies interests to keep the

Soviet's search problem as complicated as possible, as a hedge against the long-predicted Soviet breakthrough in ASW. Although many political scientists warn us that the oceans are about to become transparent (that scientists will discover a means to make ocean waters so clear that submarines hidden beneath the surface will be visible from the skies), this breakthrough is still not imminent. Soviet military strategy, however, explicitly requires the use of strategic ASW against enemy missile-carrying submarines in time of war. Here we should keep up our guard against a possible Soviet breakthrough in ASW capability.

Reduction of SSBN hulls in the future has three possible implications of major importance. First, substantially reducing the number of targets for Soviet strategic ASW action is a problem that must be constantly monitored by government intelligence agencies who assess enemy ASW warfare capabilities. If we reduced the number of SSBNs to say 17 or 18, using a rule of thumb that 2/3 of that force might normally be on patrol, then the Soviets and their allies would only have to search for 12 targets during normal peacetime patrols. Similarly, if Soviet SSBN numbers are reduced significantly, this will have an effect upon planned maritime operations in time of war and therefore in the planned procurement of antisubmarine warfare capable forces in the West in time of peace.

Secondly, if the number of Soviet SSBNs are reduced, the Soviet Navy will likely have surplus general purpose (submarine, surface and air) forces to send into areas of the Atlantic and

Pacific oceans in time of war. Similarly, the possible reduction in the number of SSBNs in the West might have an impact in both our planned buy of cruise missile-carrying forces and conventional antisubmarine warfare forces necessary for the defense of convoys against a threat now enhanced by these extra Soviet forces.

Thirdly, no future arms control agreements with the USSR involving nuclear weapons should give them a unilateral advantage in the use of ballistic missile submarine hulls nor exclude the diesel-electric ballistic missile submarines and intermediate-range naval land-based nuclear cruise missile forces[2] currently found in the Soviet Fleets. The USSR was granted unilateral superiority in SALT I submarine hull and launcher numbers due to supposed technological inferiority. That mistake must not be repeated.

Just as the possession of nuclear weapons by third nations is an obstacle in SALT, START, and other arms control negotiations, the possession of missile-carrying submarines and ASW forces by other nations certainly complicates any of the general purpose naval arms control proposals mentioned. For example, will the United Kingdom or France deploy their SSBNs in the open ocean if the US and Soviet Union limit their submarines to safe zones? If so, the survivability of these Allied submarines is questionable since they will have to face greater numbers of Soviet ASW forces directed specifically at them. The US generally takes the position that it cannot and will not negotiate Allied nuclear

forces while the Soviet Union views all weapons that are capable of hitting its homeland as "strategic."

Similarly, if Soviet ASW forces are not allowed to enter the US ASW-free or "safe" areas, will East German, North Korean, or Cuban forces be used instead? Reflagging is an ancient maritime tradition which can be used to reduce the effectiveness of any arms control regime, making treaty compliance virtually impossible to enforce. If reflagging is not used, what will prevent each nation from benefiting from the ASW or ASW research conducted by its allies? One might consider that allies could act as sub-contractors to ensure continued mission performance even in the face of an arms control regime.

In general, any arms control limitations on antisubmarine warfare significantly reduces the opportunities for gathering intelligence, a part of our national technical means (NTMs) of verifying compliance with existing arms control agreements. Most people equate NTMs with satellite activities. Naval forces, however, have the right of transit and the right to gather intelligence on the high seas. If sea operations are restricted because they are conducted without the use of radar, visual and ESM "ASW" search equipment, these same naval forces might not be able to perform necessary observation missions verifying the arms control treaty itself. Most proponents of naval arms control do not understand the adverse effect that their proposals would have on current agreements.

Restrictions on Naval Operations

Other Soviet recommendations for naval arms control include restricting major maritime exercises to one or two each year. Asymmetries in national methods of attaining fleet readiness underlie this proposal. The Soviets believe they maintain high readiness by not exercising their fleet at sea, but by maintaining an alert status in port or at an anchorage. Virtually all other navies believe maintaining readiness is accomplished by maximizing the amount of time they remain underway at sea in an operational status. Restricting at-sea time might appear attractive to a new Administration anxious to lower the Department of Defense budgets by lowering operating and maintenance costs; however, such limits on exercises while satisfactory for continental powers like the Soviet Union, are clearly impractical for historic seapowers like the United States, the United Kingdom, France, or Japan.

In addition, proposals to limit the number and location of deployments by certain types of forces has also been suggested by the USSR. For example, the deployment of a battleship into the Baltic Sea caused an adverse reaction by a Soviet spokesman. Deployment by aircraft carrier battle groups near the Soviet homeland are operations the Russians also prefer to regulate. Fortunately, we have a nice historical record of Soviet compliance with such naval arms control with the Montreaux Treaty of 1936. Although one can argue that the USSR has not violated the exact letter of the treaty and in the end it is a political document subject to the interpretation of the government of

Turkey, the record speaks of a nation that has not been faced with any restriction that it would not find a way around.

Proposals on specific ship deployments besides being asymmetric and self-serving have two major flaws. First, they undermine the principle of navigational freedom so vital to our military forward deployment strategy and our economic well being. I believe this principle is more important to this nation and its Allies and trading partners than any benefit we may derive from limiting fleet deployments by the Soviets. Secondly, deployment limits undermine deterrence, especially of our major Allies on exposed flanks. Major fleet task forces of the US Navy remain a visible deterrent to Soviet aggression in the Norwegian Sea and Eastern Mediterranean and as a reminder of our commitment to defend the exposed flanks of Iceland, Norway, Greece and Turkey. If the Soviets desire reduced US naval presence in these areas, they must be prepared to give up something of equal value.

Soviet proposals for zones of peace or nuclear free zones at sea are additional long standing proposals that would adversely complicate US Navy operations. Such zones lend themselves to large regional varieties, such as a zone of peace for the Indian Ocean, or in more limited geographic areas, like the Baltic Sea. Aggregated on a map, they virtually encircle the Soviet Union providing a defensive buffer. National defense is a laudable goal for any nation, and we can appreciate a genuine Soviet desire to maintain its security; however, peace zones and nuclear free zones are fragments of the Kremlin's wide-ranging tactics undermining regional, hence global stability by excluding the US and

Western sea powers from vital areas, even if they do it one small step at a time.[3] If one looks at a map of the world with the Soviet Union at the center, zones of peace are seen to naturally complement the already overwhelming zones of active and passive defenses that encircle that nation.

There has been some past success with nuclear weapons free zones, space being a case in point. Space, however, is not free of nuclear material and we must simply believe that nuclear powered satellites cannot be "converted" into nuclear weapons by the toggle of a switch from a control panel on earth. Similar concerns need addressing if a nuclear weapons free zone is discussed regarding our vast open seas. One of the best examples of a zone of peace is the de-militarization of the Great Lakes by the Rush-Bagot Treaty of 1817. What is rarely mentioned, however, is the general disregard for this treaty's provisions since the time of the American Civil War. How many Americans realize that the US Navy even had training aircraft carriers in the Great Lakes during World War II?

Zones of peace or nuclear free zones at sea would also tend to undermine the NATO strategy of flexible response, which includes options other than immediate escalation to a major nuclear war if NATO faces conventional defeat on land. Retaining a full spectrum of war fighting options, including the ability to initiate limited nuclear war from the sea, remains in the best interests of the NATO nations. Nuclear free zones are generally proposed in such areas that this option would be more difficult.

As stated earlier, if the Soviets are fearful of Western naval capabilities and are anxious to enter into serious negotiations, they should offer something of equal value. Soviet naval forces are not central to Soviet decision-making and are not an appropriate quid pro quo for reductions in the US Navy. As former Secretary of Defense Carlucci said, our naval capabilities and seaborne shipping should be equated with the Soviets capabilities to reinforce and resupply the Eastern European empire - roads and railways.[4] The importance of land transportation to the economies of Warsaw Treaty nations is of approximately the same importance as sea transportation in the West. If the idea of restrictions on roads and railways proves unnegotiable, why not consider the size of Soviet ground forces and their impressive system for military and industrial mobilization?

Restrictions on Technology

Other Soviet arms control proposals include limiting technological development of strategic ASW. This proposal assumes we can distinguish between "strategic" ASW and "tactical" ASW - tactical ASW involving the hunting and elimination of submarines that do not carry ballistic or long-range cruise missiles. Obviously, proponents of this cavalier idea have little first hand operational sea experience.

Attempting to regulate strategic antisubmarine warfare technology without imposing similar restrictions on operational or tactical antisubmarine warfare technology is obviously neither practical nor in the best interests of NATO nations. If the

success of NATO defense strategy continues to depend upon the reinforcement/resupply of Europe from North America in the event of conventional war, Allies will require the most advanced ASW warfare techniques to get convoys across the Atlantic. In contrast, Warsaw Pact nations can fight in Europe without relying on vulnerable sea transportation and are thus in a better position to handle ASW technology restrictions.

If we agree to such restrictions and accept increased vulnerability to our seaborne shipping, will arms control advocates agree to increase the capabilities of intercontinental air transportation and the defense of the air ways? Probably not. Their likely recommendation will be to regulate air transportation as well, leaving us with no real way to ensure that men and material can get across the Atlantic!

How can we even attempt to regulate the development of ASW technology so that it will only be used to find submarines not carrying strategic nuclear missiles? How can we regulate the passage of warships or State-owned merchant ships through the high seas and ensure that they are not finding submarines when they must search for other ships in order to avoid collisions? How can we ensure that the Soviet Union will comply with such restrictions and what will we do if we discover one of their fishing vessels has reported sighting one of our submarines? The US cannot gamble on surrendering its lead in ASW (or other) technological developments by agreeing to restrictions in a future arms control regime.

Restrictions on antisubmarine warfare technology will also result in unrealistic requirements in our intelligence collection operations. How do we intend to monitor what is going on in Soviet bloc laboratories? If development of certain types of weapons or intelligence collection systems constitute the measure of effectiveness for ASW technology, it is possible the strict constructionist in the USSR will simply develop alternative unregulated devices to achieve the same results.

There is a significant lesson here relating to actions taken by the Soviet Union regarding ballistic missile defense despite Anti-ballistic Missile (ABM) Treaty provisions. Most people in the West believe ballistic missile defense was outlawed by the ABM Treaty. Intelligence collection was concentrated on inspection measures of ABM defense as specified by the Treaty. We did not look at proliferation and mobility of missiles and hardening of silos - alternative and unregulated means of defense against ballistic missiles. Thus, the Soviets achieved ballistic missile defense via methods not regulated by the treaty while the US gave up the goal of ballistic missile defense.

The Goal of Arms Control

Arms control does not simply mean the signing of treaties. Worthwhile arms control agreements should accomplish at least one of the following: (1) reduce the likelihood of war; (2) reduce the consequences of war; and/or (3) reduce costs. These measures should, however, be integrated into a national security policy in conjunction with the national security of our Allies.

A typical example used by arms control enthusiasts to "demonstrate" the advantage of naval arms control is the Washington Naval Arms Conference.[5] The conference placed major constraints only on building then-"strategic" weapons - capital ships and aircraft carriers. There were no regulations for building submarines and only limited regulations for construction of other warships. The monetary savings achieved in the 1920s by the US not building capital ships was negated by expenses incurred during the 1930s naval arms buildup. Can we seriously argue then that the Washington Conference met any of the three fundamental goals of arms control? Is the record better if we add in the naval arms control provisions of the Treaty of Versailles, the 1930 and 1936 London Treaty and the 1935 Anglo-German Naval Agreement? No.

One of the major lessons learned from previous naval arms control negotiations is that such negotiations not only limit necessary preparation for deterrence, but deter democracies from exposing totalitarian nations who openly violate such agreements. During the inter-war period, Germany, Italy and Japan built warships exceeding limits set forth in arms control and other treaties, a fact that was actively hidden by at least one major democracy.[6] No one should seriously argue that previous naval arms control accomplished and of the three substantive goals of arms control.

What Can be Done Today?

Actions can be taken to meet the real objectives of arms control. An exchange of military academicians is a useful first step. The USSR can help the West better understand its military doctrine and strategy and its internal debates about these issues. We must be assured that their doctrine and strategy are no longer based on war-fighting concepts against the West which limit damage to the USSR and offensive first-strike operations. The best way of dealing with the Soviets is in the same way that they see themselves, rather than in some theoretically "rational" manner that only makes sense to a Western civilian academic. Perhaps the military officers of both countries could write on military doctrine and strategy in each other's professional journals. Such a proposal should not be left to chance but should be organized by the two nation's militaries. Similar writings by academics should also be encouraged.

Though the US would like to see military vulnerability accepted in the USSR so that it can decide that Mutual Assured Destruction ("MAD") described the state of the world, it is up to the Soviets to demonstrate in both word and deed that their past behavior and policies have now changed. As a first step, the USSR can dismantle its most threatening first-strike intercontinental ballistic missiles or cease deployment of new land-based mobiles missiles that might cause the US to counter with similar systems. These would be first steps in <u>naval</u> arms control since our ability to accept regulations at sea depend to a large degree upon what happens upon the land.

Each superpower must recognize that its views of a logical deterrent posture can appear as a threat to the other side. Existing Soviet land-based ballistic missiles that directly threaten our Minutemen and Peacekeeper missiles, an extremely robust defense against bombers and cruise missiles, a commitment to ballistic missile defense and an aggressive ASW research and development program coupled with what we know to have been Soviet military strategy are aggressive measures toward capturing overall military superiority rather than merely providing a "reasonably sufficient" defense. Each side must monitor the external images that its rhetoric, force structure, deployments and exercises portray to the other.

Supporters of naval arms control need to wrestle with major problems in all of the above proposals before Soviet recommendations can be taken seriously by the US. One of the most important considerations is whether or not such restrictions remain in place during an armed conflict. The definition of armed conflict proves as elusive as defining a warship, the issue there being whether or not Coast Guard and KGB forces, national revenue service or grey-painted merchant marine units are or should be classified as warships. If superpowers can agree on definitions, their next move may be sharing war gaming and political/military simulation capabilities to assist in the agreement on the impacts of any proposed arms control restrictions. Granted such simulations would be necessarily guarded but they might prove a good opportunity to understand the way that each side looks at military problems. More importantly, they might aid each side in

developing the measures of effectiveness that it needs to model the behavior of the other nation.

Even now there are some modest arms control measures that can be pursued, clearly peripheral measures that do not involve major or central military weapons systems. Actions reducing excessive Soviet military general forces capabilities and overseas deployments rather than mere words are significant confidence building measures. Agreements on notification of ballistic missile tests and on the prevention of dangerous military activities were recently signed. Perhaps we can agree on advance notification of naval exercises as well. Past experiences, however, with advance notification of exercises which are regulated by the existing Helsinki and Stockholm accords, should form a backdrop for negotiations.[7]

The existing seventeen year old bilateral incidents at sea agreement and more recent high level meetings between the military staffs of each superpower appear as constructive measures in minimizing potential crises arising out of every day military operations and maximizing communications on a professional level. Open exchange of non-sensitive data, such as the homeport of major ships, can also be non-threatening to the US Navy since this data is generally known. Expanding the incidents at sea agreement to include non-interference with submarine or aircraft operations might also be looked into.

Nations may even risk open confirmation that some of their major warships do not carry nuclear weapons. US Army and Air Force denials to other countries that bases or forces are nuclear capable are commonplace. If we already exchange inspectors because of the new INF Treaty, why not exchange additional data during major exercises?

Although nuclear free zones or zones of peace may not necessarily be a good idea for the West, they represent a reasonably good fallback position if the US Navy is strongly encouraged to engage in naval arms control by an insistent Secretary of Defense, President, or Congress. Simply put, it is far better to promise to not deploy nuclear (or other) weapons in specific geographic locations than to not build them at all. In the event that the agreement fails, it is far more easy to recover from the former than the latter.

Similarly, no first nuclear use at sea is another concept worth exploring. In my opinion, it is not in the interest of the US Navy to fight a nuclear war at sea. The Soviet Union probably would benefit if it were to go nuclear and get in the first strike at sea yet it promises not to go nuclear first. If the US promises to not go nuclear first and ties the deterrence of nuclear war at sea (as it does now) to a threat to expand the war to the shore, then this would probably be acceptable to our own and NATO strategists although the principle of flexible response would be undermined.

Perhaps the US Navy could suffer the loss of some of its

Perhaps the US Navy could suffer the loss of some of its tactical nuclear weaponry at sea. If this is what we are doing anyway, then why not make this reduction a part of an arms control regime instead of a unilateral budgetary or programming action. We must guard, however, against too deep a reduction so as to not either affect our war-fighting needs or our deterrence of tactical nuclear war at sea.

One final area that we might have to look at is that of Permissive Action Links (PALs). PALs require receipt of an active signal for the firing of a nuclear device. PALs are found on strategic bombers and in the system for the launch of land-based intercontinental ballistic missiles. Although generally impractical for our SSBNs (and a highly emotional issue for the crews involved), what has been our acceptance of this principle with sea-based cruise missiles? PALs constitute one more component that might break down or be interfered with. They thus represent another opportunity for ballistic missile defense and strategic ASW for the Soviets. Yet, might we not compromise and accept PALs rather than risk more degrading measures?

The US Navy must develop a non-threatening position on arms control minimizing any impact on the ability of our fleet to perform peacetime and wartime missions. We need to alleviate the perception that the Navy is stonewalling on arms control. Fortunately the Navy is doing serious internal staff work on all these issues and will be well equipped to handle the policy questions of the next few years.

In the absence of a comprehensive global arms control regime, I doubt whether it is wise or possible to single out specific regions where naval operations should be regulated by new arms control measures. Perhaps the best thing that naval officers can do is explain why there must not be a stand-alone "naval" arms control agreement and why we should not even use the term "naval arms control." It is an issue that will not go away nor one that can be handled by uniformed officers alone.

A meaningful arms control agreement involving naval forces must be accompanied by a comprehensive plan regulating virtually all nuclear and non-nuclear forces and activities, and involve nations including more than just the two superpowers. Any nation currently allied with the US and any nation that desires the option of future aid from an American fleet has a major stake in ensuring that the Soviets do not restrict US maritime operations.

The issues involved with the naval arms control suggestions discussed herein should demonstrate the growing complexity of modern warfare. Neat distinctions between the offense and defense or even nuclear and non-nuclear warfare and warfare in one theater are almost meaningless without consideration of the rest of the equation. If warfare is this complex, it is obvious that we cannot consider arms control with such outmoded concepts as regulations involving only certain areas of the world or certain types of weapons systems. All future crises and wars between the superpowers will be both automatically global and nuclear. In some of them, the crisis or war will have not yet expanded to a

new area of confrontation and hopefully in all of them, the nuclear weapons have not yet been used.

I believe the current or projected nuclear or maritime balance of forces between the US and USSR both in the any single region and worldwide is not so severe that immediate arms control is needed. Wars do not begin by events that happen on the sea. The two superpowers are adjusting to new technological opportunities and political realities and need time to come to a mutual understanding. Although it is extremely fashionable in the US and the West to think of arms control in terms of a "non-zero sum game," in which one side does not gain advantage over the other, arms control as a part of an overall national security strategy properly places it in the "zero sum game camp." Arms control strategy is competitive strategy where one side gains an advantage over the other.

Where to start the process is an interesting exercise. On the one hand, strategists often start with some concept of the threat. The strategist tries to deal with this threat. On the other hand, the arms controller often starts his thinking process with the goal. Both arms control enthusiasts and strategists may be forced to begin the process with the output of the budgeter and Congress; i.e. the resources available and not necessarily the threat or the goal.

More importantly, we need to think through the naval arms control issue and move ahead of the Soviets in more effectively handling the press and informing the American public of the

issues involved. Well thought out alternative proposals should be presented by active-duty naval officers with help from civilian academic personnel and arms control supporters. The US Navy cannot refuse to participate in naval arms control strategy. By applying logic and experience in seeking the best for the nation, the Bush Administration can initiate negotiations. We must not forget, however, that until we fully understand the internal changes ongoing in Mikhail Gorbachev's "restructured" Soviet Union, there will be nothing so threatening about the political/military situation at sea today requiring us to attempt naval arms control.

Footnotes

1. Example: Ivo H. Daalder and Tim Zimmermann's "Banning Nuclear Weapons at Sea: A Neglected Strategy," Arms Control Today, Vol. 18, No. 9, November 1988, pp. 17-23.

2. Mobile SSC-1b Sepal battalions of land-based intermediate-range cruise missiles have been excluded from regulation under the new INF treaty. Although designed for coastal defense, these and other naval sea-based cruise missiles can be used against land targets. See Steven J. Zaloga, "Before INF Treaty is Signed, US Must Consider the Forgotten Missiles," Armed Forces Journal International, Vol. 125, No. 10, May 1988, pp. 36-38.

3. The South Pacific Nuclear Free Zone agreement signed in Rorotonga in 1986 contained an escape clause for the Soviet Union whereby they would not be required to comply with the treaty in waters of any signatory nation that allowed visits by US warships.

4. Remarks made by Secretary of Defense Carlucci at the Voroshilov Military Academy of the General Staff of the USSR, August 1988, Department of State transcript.

5. Paul G. Johnson, "Arms Control: Upping the Ante," U.S. Naval Institute Proceedings, Vol. 109, No. 8, August 1983, pp. 28-34.

6. Stephen Roskill, Naval Policy Between the Wars, Vol. II - The Period of Reluctant Rearmament 1930-1939, Annapolis, Maryland: Naval Institute Press, 1976, p. 371.

7. The Soviets argued that an article in Pravda constituted the required notification of their ZAPAD-81 exercise and that this exercise was actually an amalgamation of smaller exercises whose size did not warrant notification.

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